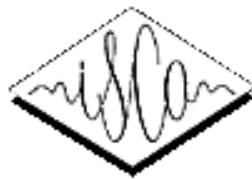
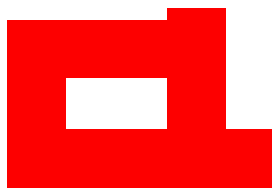


SIGDIAL 2013



**14th Annual Meeting of the
Special Interest Group on Discourse and
Dialogue**



Proceedings of the Conference



Supélec

22-24 August 2013

SUPELEC

Metz, France

In cooperation with:

Association for Computational Linguistics (ACL)

International Speech Communication Association (ISCA)

Association for the Advancement of Artificial Intelligence (AAAI)

We thank our sponsors:

Amazon Apple AT&T
Heidelberg Institute for Theoretical Studies (HITS) Honda Research Institute (HRI)
La Région Lorraine Microsoft Nuance Samsung SUPELEC



©2013 The Association for Computational Linguistics

Association for Computational Linguistics (ACL)
209 N. Eighth Street
Stroudsburg, PA 18360
USA
Tel: +1-570-476-8006
Fax: +1-570-476-0860
acl@aclweb.org

ISBN 978-1-937284-95-4

Introduction

Welcome to the SIGDIAL 2013 Conference, the 14th Annual Meeting of the Special Interest Group on Discourse and Dialogue. The conference is held in Metz, France, August 22-24, 2013, and is co-located with the 14th Annual Conference of the International Speech Communication Association (INTERSPEECH).

We received a record 115 submissions. Submissions were received from 24 different countries around the world, including countries in Asia (24 submissions), Australia/New Zealand (2), Europe (49), North America (37), and South America (3). Of the 115 submissions, 63 were long paper submissions, 35 short paper submissions, and 17 demonstration submissions.

All papers received 3 reviews, and demonstrations 2 reviews. The members of the Program Committee did a superb job in reviewing the submitted papers. We thank them for their advice in selecting the accepted papers and for helping to maintain the high quality of the program. In line with the SIGDIAL tradition, our aim has been to create a balanced program that could accommodate as many favorably rated papers as possible. Of the 63 long paper submissions, 40 were accepted: 26 were accepted as long papers for oral presentation, 5 were accepted as long papers for poster presentation, and 9 were accepted as short papers for poster presentation. Of the 35 short paper submissions, 17 were accepted for poster presentation, for a total of 31 posters. Of the 17 demonstration submissions, 14 were accepted. In light of the record number of papers and demonstrations, this year SIGDIAL runs 2.5 days, rather than 2 days as had been the convention for the past few meetings.

SIGDIAL continues to serve as a publication venue for research that spans many aspects of discourse and dialogue. This year, the program contained oral presentation sessions and poster papers on discourse, semantics, generation, situated and multi-modal dialogue, dialogue system control and evaluation, models of dialogue and spoken discourse, speech processing technology in dialogue, and dialogue state tracking, as well as on the SIGDIAL 2013 special theme on “Discourse and Dialogue in Social Media”. SIGDIAL 2013 also hosted results from the “Dialogue State Tracking Challenge”, organized by Jason D. Williams, Antoine Raux, Deepak Ramachandran, and Alan Black. Papers related to this challenge were submitted and reviewed as normal SIGDIAL papers, with 9 being accepted.

We particularly thank the two keynote speakers for their contributions to research on discourse and dialog systems: Bonnie Webber (University of Edinburgh) and Jerome Bellegarda (Apple Inc).

We thank Kallirroi Georgila, Mentoring Chair for SIGDIAL 2013. The goal of mentoring is to assist authors of papers that contain innovative ideas to improve their quality regarding English language usage or paper organization. This year, 7 of the accepted papers were mentored. We thank the Program Committee members who volunteered to serve as mentors: Ron Artstein, Heriberto Cuayáhuil, Kallirroi Georgila, Andrei Popescu-Belis, Matthew Purver, Carolyn Penstein Rosé, and Amanda Stent.

We extend special thanks to Olivier Pietquin, the local arrangements chair, and his local arrangements team of Calogero Bomba, Danièle Cebe, Jérémy Fix, Thérèse Fressengeas, Matthieu Geist, Sébastien Van Luchène, Claudine Mercier, Nathalie Ruch, and Chantal Sabbagh. SIGDIAL 2013 would not have been possible without Olivier, who worked tirelessly to handle a seemingly unending stream of details for the local arrangements, from organizing the venue, handling registration, arranging student accommodation, planning video recording, helping individual participants navigate public transport in France, and more. We also thank the student volunteers for on-site assistance. Thanks to Casey Kennington for preparing the USB drives with the proceedings.

We thank Amanda Stent, Sponsorships Chair, for recruiting and liaising with our conference sponsors. The sponsorship program enables valuable aspects of the program, such as the invited speakers,

conference reception and dinner, and best paper awards. We gratefully acknowledge the support of our sponsors, including Amazon, Apple, AT&T, Heidelberg Institute for Theoretical Studies (HITS), Honda Research Institute (HRI), La Région Lorraine, Microsoft, Nuance, Samsung, and SUPELEC. We also thank Priscilla Rasmussen at the ACL for handling the financial aspects of sponsorship for SIGDIAL 2013.

We gratefully acknowledge SoftConf for use of the START conference management system.

We also thank the SIGdial board, especially officers Tim Paek, Amanda Stent, and Kristiina Jokinen, for their advice and support. In particular we thank Amanda Stent for providing continuity, as a program chair for SIGDIAL 2012.

Finally, we thank all the authors of the papers in this volume, and all the conference participants for making this event such a great opportunity for new research in dialogue and discourse.

Maxine Eskenazi and Michael Strube
General Co-Chairs

Barbara Di Eugenio and Jason D. Williams
Technical Program Co-Chairs

SIGDIAL 2013

General Co-Chairs:

Maxine Eskénazi, Carnegie Mellon University, USA
Michael Strube, Heidelberg Institute for Theoretical Studies, Germany

Program Co-Chairs:

Barbara Di Eugenio, University of Illinois at Chicago, USA
Jason D. Williams, Microsoft Research, USA

Local Chair:

Olivier Pietquin, SUPELEC, France

Mentoring Chair:

Kallirroi Georgila, University of Southern California Institute for Creative Technologies (ICT), USA

Sponsorship Chair:

Amanda Stent, AT&T Labs - Research, USA

SIGdial Officers:

President: Amanda Stent, AT&T Labs - Research, USA
Vice President: Jason D. Williams, Microsoft Research, USA
Secretary/Treasurer: Kristiina Jokinen, University of Helsinki, Finland

Program Committee:

Hua Ai, 360i, USA
Jan Alexandersson, German Research Institute for Artificial Intelligence (DFKI GmbH), Germany
Ron Artstein, University of Southern California Institute for Creative Technologies (ICT), USA
Srinivas Bangalore, AT&T Labs - Research, USA
Timo Baumann, University of Hamburg, Germany
Luciana Benotti, Universidad Nacional de Cordoba, Argentina
Nate Blaylock, Nuance Communications, USA
Dan Bohus, Microsoft Research, USA
Johan Boye, KTH Royal Institute of Technology, Sweden
Kristy Boyer, North Carolina State University, USA
Harry Bunt, Tilburg University, The Netherlands
Sandra Carberry, University of Delaware, USA
Giuseppe Carenini, University of British Columbia, Canada
Christophe Cerisara, Loria, France
Joyce Chai, Michigan State University, USA
Jennifer Chu-Carroll, IBM T. J. Watson Research Center, USA
Mark Core, University of Southern California Institute for Creative Technologies (ICT), USA
Paul A. Crook, Microsoft, USA
Heriberto Cuayáhuitl, Heriot-Watt University, UK
David DeVault, University of Southern California Institute for Creative Technologies (ICT), USA
Giuseppe Di Fabbrizio, Amazon Research, USA

Myroslava Dzikovksa, University of Edinburgh, UK
Raquel Fernández, University of Amsterdam, The Netherlands
Claire Gardent, CNRS/Loria, Nancy, France
Kallirroi Georgila, University of Southern California Institute for Creative Technologies (ICT), USA
Gary Geunbae Lee, POSTECH, Korea
Jonathan Ginzburg, Université Paris Diderot, France
Agustin Gravano, University of Buenos Aires, Argentina
Nancy Green, University of North Carolina at Greensboro, USA
Alexander Gruenstein, Google, USA
Curry Guinn, University of North Carolina at Wilmington, USA
Joakim Gustafson, KTH Royal Institute of Technology, Sweden
Peter Heeman, Oregon Health and Sciences University, USA
Michael Johnston, AT&T Labs - Research, USA
Kristiina Jokinen, University of Helsinki, Finland
Arne Jönsson, Linköping University, Sweden
Pamela Jordan, University of Pittsburgh, USA
Tatsuya Kawahara, Kyoto University, Japan
Simon Keizer, Heriot-Watt University, UK
Alistair Knott, University of Otago, New Zealand
Kazunori Komatani, Nagoya University, Japan
Stefan Kopp, Bielefeld University, Germany
Ian Lane, Carnegie Mellon University, USA
Alex Lascarides, University of Edinburgh, Scotland
Sungjin Lee, Carnegie Mellon University, USA
Oliver Lemon, Heriot-Watt University, UK
Anton Leuski, University of Southern California Institute for Creative Technologies (ICT), USA
Diane Litman, University of Pittsburgh, USA
Ramón López-Cózar, University of Granada, Spain
Wolfgang Minker, University of Ulm, Germany
Teruhisa Misu, Honda Research Institute, USA
Sebastian Möller, Telekom Innovation Laboratories, TU Berlin, Germany
Mikio Nakano, Honda Research Institute, Japan
Ani Nenkova, University of Pennsylvania, USA
Vincent Ng, University of Texas at Dallas, USA
Tim Paek, Microsoft Research, USA
Olivier Pietquin, SUPELEC IMS-MaLIS research group - UMI 2958 (GeorgiaTech – CNRS), France
Paul Piwek, Open University, UK
Andrei Popescu-Belis, Idiap Research Institute, Switzerland
Matthew Purver, Queen Mary University of London, UK
Antoine Raux, Lenovo, USA
Norbert Reithinger, German Research Institute for Artificial Intelligence (DFKI GmbH), Germany
Hannes Rieser, Bielefeld University, Germany
Carolyn Penstein Rosé, Carnegie Mellon University, USA
David Schlangen, Bielefeld University, Germany
Elizabeth Shriberg, Microsoft Research, USA
Candace Sidner, Worcester Polytechnic Institute, USA
Gabriel Skantze, KTH Royal Institute of Technology, Sweden
Manfred Stede, University of Potsdam, Germany
Amanda Stent, AT&T Labs - Research, USA

Matthew Stone, Rutgers University, USA
Svetlana Stoyanchev, Columbia University, USA
Kristina Striegnitz, Union College, USA
Marc Swerts, Tilburg University, The Netherlands
Takenobu Tokunaga, Tokyo Institute of Technology, Japan
Thora Tenbrink, Bangor University, UK
Joel Tetreault, Nuance Communications, USA
Blaise Thomson, University of Cambridge, UK
Gokhan Tur, Microsoft Research, USA
Renata Vieira, PUCRS, Brazil
Marilyn Walker, University of California at Santa Cruz, USA
Nigel Ward, University of Texas at El Paso, USA
Kai Yu, Shanghai Jiao Tong University, China
Ingrid Zukerman, Monash University, Australia

Additional Reviewers:

Hendrik Buschmeier, Bielefeld University, Germany
Lin Chen, University of Illinois at Chicago, USA
Nina Dethlefs, Heriot-Watt University, UK
Klaus-Peter Engelbrecht, TU-Berlin, Germany
Roger Granada, IRIT, France
Stefan Hillmann, TU-Berlin, Germany
Ethan O. Selfridge, Oregon Health and Sciences University, USA

Invited Speakers:

Jerome Bellegarda, Apple Inc, USA
Bonnie Webber, University of Edinburgh, UK

Table of Contents

<i>Discourse Relations, Discourse Structure, Discourse Semantics</i>	
Bonnie Webber	1
<i>Expressivity and comparison of models of discourse structure</i>	
Antoine Venant, Nicholas Asher, Philippe Muller, Pascal Denis and Stergos Afantenos	2
<i>Unsupervised structured semantic inference for spoken dialog reservation tasks</i>	
Alejandra Lorenzo, Lina Rojas-Barahona and Christophe Cerisara	12
<i>Toward a Better Understanding of Causality between Verbal Events: Extraction and Analysis of the Causal Power of Verb-Verb Associations</i>	
Mehwish Riaz and Roxana Girju	21
<i>Training an integrated sentence planner on user dialogue</i>	
Brian McMahan and Matthew Stone	31
<i>Topic Independent Identification of Agreement and Disagreement in Social Media Dialogue</i>	
Amita Misra and Marilyn Walker	41
<i>Automatic Prediction of Friendship via Multi-model Dyadic Features</i>	
Zhou Yu, David Gerritsen, Amy Ogan, Alan Black and Justine Cassell	51
<i>Stance Classification in Online Debates by Recognizing Users' Intentions</i>	
Sarvesh Ranade, Rajeev Sangal and Radhika Mamidi	61
<i>Generating More Specific Questions for Acquiring Attributes of Unknown Concepts from Users</i>	
Tsugumi Otsuka, Kazunori Komatani, Satoshi Sato and Mikiyo Nakano	70
<i>Modeling Collaborative Referring for Situated Referential Grounding</i>	
Changsong Liu, Rui Fang, Lanbo She and Joyce Chai	78
<i>A quantitative view of feedback lexical markers in conversational French</i>	
Laurent Prévot, Brigitte Bigi and Roxane Bertrand	87
<i>On the contribution of discourse structure to topic segmentation</i>	
Paula Cardoso, Maite Taboada and Thiago Pardo	92
<i>Will my Spoken Dialogue System be a Slow Learner ?</i>	
Layla El Asri and Romain Laroche	97
<i>Model-free POMDP optimisation of tutoring systems with echo-state networks</i>	
Lucie Daubigny, Matthieu Geist and Olivier Pietquin	102
<i>Patterns of Importance Variation in Spoken Dialog</i>	
Nigel Ward and Karen Richart-Ruiz	107
<i>Reinforcement Learning of Two-Issue Negotiation Dialogue Policies</i>	
Kallirroï Georgila	112
<i>Dialogue Act Recognition in Synchronous and Asynchronous Conversations</i>	
Maryam Tavafi, Yashar Mehdad, Shafiq Joty, Giuseppe Carenini and Raymond Ng	117

<i>Improving Interaction Quality Recognition Using Error Correction</i> Stefan Ultes and Wolfgang Minker	122
<i>A Prolog Datamodel for State Chart XML</i> Stefan Radomski, Dirk Schnelle-Walka and Stephan Radeck-Arneth	127
<i>Exploring Features For Localized Detection of Speech Recognition Errors</i> Eli Pincus, Svetlana Stoyanchev and Julia Hirschberg	132
<i>Modelling Human Clarification Strategies</i> Svetlana Stoyanchev, Alex Liu and Julia Hirschberg	137
<i>Interactive Error Resolution Strategies for Speech-to-Speech Translation Systems</i> Rohit Kumar, Matthew Roy, Sankaranarayanan Ananthakrishnan, Sanjika Hewavitharana and Frederick Choi	142
<i>AIDA: Artificial Intelligent Dialogue Agent</i> Rafael E. Banchs, Ridong Jiang, Seokhwan Kim, Arthur Niswar and Kheng Hui Yeo	145
<i>Demonstration of an Always-On Companion for Isolated Older Adults</i> Candace Sidner, Timothy Bickmore, Charles Rich, Barbara Barry, Lazlo Ring, Morteza Behrooz and Mohammad Shayganfar	148
<i>A Multithreaded Conversational Interface for Pedestrian Navigation and Question Answering</i> Srinivasan Janarthanam, Oliver Lemon, Xingkun Liu, Phil Bartie, William Mackaness and Tiphaine Dalmas	151
<i>Demonstration of the PARLANCE system: a data-driven incremental, spoken dialogue system for interactive search</i> Helen Hastie, Marie-Aude Afaure, Panos Alexopoulos, Heriberto Cuayáhuatl, Nina Dethlefs, Milica Gasic, James Henderson, Oliver Lemon, Xingkun Liu, Peter Mika, Nesrine Ben Mustapha, Verena Rieser, Blaise Thomson, Pirros Tsiakoulis and Yves Vanrompay	154
<i>Multi-step Natural Language Understanding</i> Pierrick Milhorat, Stephan Schlögl, Gérard Chollet and Jérôme Boudy	157
<i>WebWOZ: A Platform for Designing and Conducting Web-based Wizard of Oz Experiments</i> Stephan Schlögl, Saturnino Luz and Gavin Doherty	160
<i>Exploring the effects of gaze and pauses in situated human-robot interaction</i> Gabriel Skantze, Anna Hjalmarsson and Catharine Oertel	163
<i>Interpreting Situated Dialogue Utterances: an Update Model that Uses Speech, Gaze, and Gesture Information</i> Casey Kennington, Spyros Kousidis and David Schlangen	173
<i>Multimodality and Dialogue Act Classification in the RoboHelper Project</i> Lin Chen and Barbara Di Eugenio	183
<i>Verbal indicators of psychological distress in interactive dialogue with a virtual human</i> David DeVault, Kallirroi Georgila, Ron Artstein, Fabrizio Morbini, David Traum, Stefan Scherer, Albert (Skip) Rizzo and Louis-Philippe Morency	193
<i>Spoken Language Understanding for Natural Interaction</i> Jerome Bellegarda	203

<i>Learning Dialogue Management Models for Task-Oriented Dialogue with Parallel Dialogue and Task Streams</i>	
Eun Ha, Christopher Mitchell, Kristy Boyer and James Lester	204
<i>POMDP-based dialogue manager adaptation to extended domains</i>	
Milica Gasic, Catherine Breslin, Matthew Henderson, Dongho Kim, Martin Szummer, Blaise Thomson, Pirros Tsiakoulis and Steve Young	214
<i>Training and evaluation of an MDP model for social multi-user human-robot interaction</i>	
Simon Keizer, Mary Ellen Foster, Oliver Lemon, Andre Gaschler and Manuel Giuliani	223
<i>Evaluation of Speech Dialog Strategies for Internet Applications in the Car</i>	
Hansjörg Hofmann, Ute Ehrlich, André Berton, Angela Mahr, Rafael Math and Christian Müller	233
<i>Predicting Tasks in Goal-Oriented Spoken Dialog Systems using Semantic Knowledge Bases</i>	
Aasish Pappu and Alexander Rudnicky	242
<i>Surface Text based Dialogue Models for Virtual Humans</i>	
Sudeep Gandhe and David Traum	251
<i>Speech Reduction, Intensity, and F0 Shape are Cues to Turn-Taking</i>	
Oliver Niebuhr, Karin Görs and Evelin Graupe	261
<i>Gesture Semantics Reconstruction Based on Motion Capturing and Complex Event Processing: a Circular Shape Example</i>	
Thies Pfeiffer, Florian Hofmann, Florian Hahn, Hannes Rieser and Insa Röpke	270
<i>Open-ended, Extensible System Utterances Are Preferred, Even If They Require Filled Pauses</i>	
Timo Baumann and David Schlangen	280
<i>A Four-Participant Group Facilitation Framework for Conversational Robots</i>	
Yoichi Matsuyama, Iwao Akiba, Akihiro Saito and Tetsunori Kobayashi	284
<i>Tacit Social Contracts for Wheelchairs</i>	
Daniel Couto Vale and Vivien Mast	294
<i>Laughter and Topic Transition in Multiparty Conversation</i>	
Emer Gilmartin, Francesca Bonin, Carl Vogel and Nick Campbell	304
<i>IMHO: An Exploratory Study of Hedging in Web Forums</i>	
Liliana Mamani Sanchez and Carl Vogel	309
<i>Impact of ASR N-Best Information on Bayesian Dialogue Act Recognition</i>	
Heriberto Cuayáhuitl, Nina Dethlefs, Helen Hastie and Oliver Lemon	314
<i>Investigating speaker gaze and pointing behaviour in human-computer interaction with the mint.tools collection</i>	
Spyros Kousidis, Casey Kennington and David Schlangen	319
<i>In-Context Evaluation of Unsupervised Dialogue Act Models for Tutorial Dialogue</i>	
Aysu Ezen-Can and Kristy Boyer	324
<i>Spoken Dialog Systems for Automated Survey Interviewing</i>	
Michael Johnston, Patrick Ehlen, Frederick G. Conrad, Michael F. Schober, Christopher Antoun, Stefanie Fail, Andrew Hupp, Lucas Vickers, Huiying Yan and Chan Zhang	329

<i>Open-domain Utterance Generation for Conversational Dialogue Systems using Web-scale Dependency Structures</i>	
Hiroaki Sugiyama, Toyomi Meguro, Ryuichiro Higashinaka and Yasuhiro Minami	334
<i>Evaluating State Representations for Reinforcement Learning of Turn-Taking Policies in Tutorial Dialogue</i>	
Christopher Mitchell, Kristy Boyer and James Lester	339
<i>A Semi-supervised Approach for Natural Language Call Routing</i>	
Tatiana Gasanova, Eugene Zhukov, Roman Sergienko, Eugene Semenkin and Wolfgang Minker	344
<i>Counseling Dialog System with SWIH Extraction</i>	
Sangdo Han, Kyusong Lee, Donghyeon Lee and Gary Geunbae Lee	349
<i>Integration and test environment for an in-vehicle dialogue system in the SIMSI project</i>	
Staffan Larsson, Sebastian Berlin, Anders Eliasson and Fredrik Kronlid	354
<i>Weakly and Strongly Constrained Dialogues for Language Learning</i>	
Claire Gardent, Alejandra Lorenzo, Laura Perez-Beltrachini and Lina Rojas-Barahona	357
<i>Open-Domain Information Access with Talking Robots</i>	
Kristiina Jokinen and Graham Wilcock	360
<i>Demonstration of the EmoteWizard of Oz Interface for Empathic Robotic Tutors</i>	
Shweta Bhargava, Srinivasan Janarthanam, Helen Hastie, Amol Deshmukh, Ruth Aylett, Lee Corrigan and Ginevra Castellano	363
<i>The Map Task Dialogue System: A Test-bed for Modelling Human-Like Dialogue</i>	
Raveesh Meena, Gabriel Skantze and Joakim Gustafson	366
<i>A Robotic Agent in a Virtual Environment that Performs Situated Incremental Understanding of Navigational Utterances</i>	
Takashi Yamauchi, Mikio Nakano and Kotaro Funakoshi	369
<i>Roundtable: An Online Framework for Building Web-based Conversational Agents</i>	
Eric Forbell, Nicolai Kalisch, Fabrizio Morbini, Kelly Christoffersen, Kenji Sagae, David Traum and Albert A. Rizzo	372
<i>A Data-driven Model for Timing Feedback in a Map Task Dialogue System</i>	
Raveesh Meena, Gabriel Skantze and Joakim Gustafson	375
<i>Continuously Predicting and Processing Barge-in During a Live Spoken Dialogue Task</i>	
Ethan Selfridge, Iker Arizmendi, Peter Heeman and Jason Williams	384
<i>Which ASR should I choose for my dialogue system?</i>	
Fabrizio Morbini, Kartik Audhkhasi, Kenji Sagae, Ron Artstein, Dogan Can, Panayiotis Georgiou, Shri Narayanan, Anton Leuski and David Traum	394
<i>The Dialog State Tracking Challenge</i>	
Jason Williams, Antoine Raux, Deepak Ramachandran and Alan Black	404
<i>Recipe For Building Robust Spoken Dialog State Trackers: Dialog State Tracking Challenge System Description</i>	
Sungjin Lee and Maxine Eskenazi	414

<i>A Simple and Generic Belief Tracking Mechanism for the Dialog State Tracking Challenge: On the believability of observed information</i>	
Zhuoran Wang and Oliver Lemon	423
<i>Multi-domain learning and generalization in dialog state tracking</i>	
Jason Williams	433
<i>Structured Discriminative Model For Dialog State Tracking</i>	
Sungjin Lee	442
<i>Comparison of Bayesian Discriminative and Generative Models for Dialogue State Tracking</i>	
Lukáš Žilka, David Marek, Matěj Korvas and Filip Jurčiček	452
<i>Dialog State Tracking using Conditional Random Fields</i>	
Hang Ren, Weiqun Xu, Yan Zhang and Yonghong Yan	457
<i>Engineering Statistical Dialog State Trackers: A Case Study on DSTC</i>	
Daejoong Kim, Jaedeug Choi Choi, Kee-Eung Kim, Jungsu Lee and Jinho Sohn	462
<i>Deep Neural Network Approach for the Dialog State Tracking Challenge</i>	
Matthew Henderson, Blaise Thomson and Steve Young	467

Conference Program

Thursday, August 22, 2013

9:00 Welcome and conference overview

Keynote I

9:10 *Discourse Relations, Discourse Structure, Discourse Semantics*
Bonnie Webber

10:10 Break

Oral session: Discourse, semantics, and generation

10:35 *Expressivity and comparison of models of discourse structure*
Antoine Venant, Nicholas Asher, Philippe Muller, Pascal Denis and Stergos Afantenos

10:55 *Unsupervised structured semantic inference for spoken dialog reservation tasks*
Alejandra Lorenzo, Lina Rojas-Barahona and Christophe Cerisara

11:15 *Verbal indicators of psychological distress in interactive dialogue with a virtual human*
David DeVault, Kallirroi Georgila, Ron Artstein, Fabrizio Morbini, David Traum, Stefan Scherer, Albert (Skip) Rizzo and Louis-Philippe Morency

11:35 *Training an integrated sentence planner on user dialogue*
Brian McMahan and Matthew Stone

11:55 Lunch

Oral session: Dialog and Discourse in social media and interpersonal relationships

13:00 *Topic Independent Identification of Agreement and Disagreement in Social Media Dialogue*
Amita Misra and Marilyn Walker

13:20 *Automatic Prediction of Friendship via Multi-model Dyadic Features*
Zhou Yu, David Gerritsen, Amy Ogan, Alan Black and Justine Cassell

13:40 *Stance Classification in Online Debates by Recognizing Users' Intentions*
Sarvesh Ranade, Rajeev Sangal and Radhika Mamidi

Thursday, August 22, 2013 (continued)

Poster and demonstration session

14:00 Poster “madness” (short presentations of each poster)

14:25 Poster session (with coffee)

Generating More Specific Questions for Acquiring Attributes of Unknown Concepts from Users

Tsugumi Otsuka, Kazunori Komatani, Satoshi Sato and Mikio Nakano

Modeling Collaborative Referring for Situated Referential Grounding

Changsong Liu, Rui Fang, Lanbo She and Joyce Chai

A quantitative view of feedback lexical markers in conversational French

Laurent Prévot, Brigitte Bigi and Roxane Bertrand

On the contribution of discourse structure to topic segmentation

Paula Cardoso, Maite Taboada and Thiago Pardo

Will my Spoken Dialogue System be a Slow Learner ?

Layla El Asri and Romain Laroche

Model-free POMDP optimisation of tutoring systems with echo-state networks

Lucie Daubigney, Matthieu Geist and Olivier Pietquin

Patterns of Importance Variation in Spoken Dialog

Nigel Ward and Karen Richart-Ruiz

Reinforcement Learning of Two-Issue Negotiation Dialogue Policies

Kallirroi Georgila

Dialogue Act Recognition in Synchronous and Asynchronous Conversations

Maryam Tavafi, Yashar Mehdad, Shafiq Joty, Giuseppe Carenini and Raymond Ng

Improving Interaction Quality Recognition Using Error Correction

Stefan Ultes and Wolfgang Minker

Thursday, August 22, 2013 (continued)

A Prolog Datamodel for State Chart XML

Stefan Radomski, Dirk Schnelle-Walka and Stephan Radeck-Arneth

Exploring Features For Localized Detection of Speech Recognition Errors

Eli Pincus, Svetlana Stoyanchev and Julia Hirschberg

Modelling Human Clarification Strategies

Svetlana Stoyanchev, Alex Liu and Julia Hirschberg

Interactive Error Resolution Strategies for Speech-to-Speech Translation Systems

Rohit Kumar, Matthew Roy, Sankaranarayanan Ananthakrishnan, Sanjika Hewavitharana and Frederick Choi

AIDA: Artificial Intelligent Dialogue Agent

Rafael E. Banchs, Ridong Jiang, Seokhwan Kim, Arthur Niswar and Kheng Hui Yeo

Demonstration of an Always-On Companion for Isolated Older Adults

Candace Sidner, Timothy Bickmore, Charles Rich, Barbara Barry, Lazlo Ring, Morteza Behrooz and Mohammad Shayganfar

A Multithreaded Conversational Interface for Pedestrian Navigation and Question Answering

Srinivasan Janarthanam, Oliver Lemon, Xingkun Liu, Phil Bartie, William Mackaness and Tiphaine Dalmas

Demonstration of the PARLANCE system: a data-driven incremental, spoken dialogue system for interactive search

Helen Hastie, Marie-Aude Aufaure, Panos Alexopoulos, Heriberto Cuayáhuitl, Nina Dethlefs, Milica Gasic, James Henderson, Oliver Lemon, Xingkun Liu, Peter Mika, Nesrine Ben Mustapha, Verena Rieser, Blaise Thomson, Pirros Tsiakoulis and Yves Vanrompay

Multi-step Natural Language Understanding

Pierrick Milhorat, Stephan Schlögl, Gérard Chollet and Jérôme Boudy

WebWOZ: A Platform for Designing and Conducting Web-based Wizard of Oz Experiments

Stephan Schlögl, Saturnino Luz and Gavin Doherty

Thursday, August 22, 2013 (continued)

Oral session: Situated and multi-modal dialog

- 16:30 *Exploring the effects of gaze and pauses in situated human-robot interaction*
Gabriel Skantze, Anna Hjalmarsson and Catharine Oertel
- 16:50 *Interpreting Situated Dialogue Utterances: an Update Model that Uses Speech, Gaze, and Gesture Information*
Casey Kennington, Spyros Kousidis and David Schlangen
- 17:10 *Multimodality and Dialogue Act Classification in the RoboHelper Project*
Lin Chen and Barbara Di Eugenio

Day 1 conclusion and banquet

- 17:30 Informational announcements
- 19:00 Buses depart venue for banquet

Friday, August 23, 2013

9:00 Day overview and informational announcements

Keynote II

9:05 *Spoken Language Understanding for Natural Interaction*
Jerome Bellegarda

10:05 Break

Oral session: Dialog system control and evaluation

10:30 *Learning Dialogue Management Models for Task-Oriented Dialogue with Parallel Dialogue and Task Streams*
Eun Ha, Christopher Mitchell, Kristy Boyer and James Lester

10:50 *POMDP-based dialogue manager adaptation to extended domains*
Milica Gasic, Catherine Breslin, Matthew Henderson, Dongho Kim, Martin Szummer, Blaise Thomson, Pirros Tsiakoulis and Steve Young

11:10 *Training and evaluation of an MDP model for social multi-user human-robot interaction*
Simon Keizer, Mary Ellen Foster, Oliver Lemon, Andre Gaschler and Manuel Giuliani

11:30 *Evaluation of Speech Dialog Strategies for Internet Applications in the Car*
Hansjörg Hofmann, Ute Ehrlich, André Berton, Angela Mahr, Rafael Math and Christian Müller

11:50 Lunch, business meeting, and sponsor talks

Oral session: Models of dialog and spoken discourse

13:30 *Predicting Tasks in Goal-Oriented Spoken Dialog Systems using Semantic Knowledge Bases*
Aasish Pappu and Alexander Rudnicky

13:50 *Surface Text based Dialogue Models for Virtual Humans*
Sudeep Gandhe and David Traum

14:10 *Speech Reduction, Intensity, and F0 Shape are Cues to Turn-Taking*
Oliver Niebuhr, Karin Görs and Evelin Graupe

Friday, August 23, 2013 (continued)

Poster and demonstration session

14:30 Poster “madness” (short presentations of each poster)

14:55 Poster session (with coffee)

Gesture Semantics Reconstruction Based on Motion Capturing and Complex Event Processing: a Circular Shape Example

Thies Pfeiffer, Florian Hofmann, Florian Hahn, Hannes Rieser and Insa Röpke

Open-ended, Extensible System Utterances Are Preferred, Even If They Require Filled Pauses

Timo Baumann and David Schlangen

A Four-Participant Group Facilitation Framework for Conversational Robots

Yoichi Matsuyama, Iwao Akiba, Akihiro Saito and Tetsunori Kobayashi

Tacit Social Contracts for Wheelchairs

Daniel Couto Vale and Vivien Mast

Laughter and Topic Transition in Multiparty Conversation

Emer Gilmartin, Francesca Bonin, Carl Vogel and Nick Campbell

IMHO: An Exploratory Study of Hedging in Web Forums

Liliana Mamani Sanchez and Carl Vogel

Impact of ASR N-Best Information on Bayesian Dialogue Act Recognition

Heriberto Cuayáhuitl, Nina Dethlefs, Helen Hastie and Oliver Lemon

Investigating speaker gaze and pointing behaviour in human-computer interaction with the mint.tools collection

Spyros Kousidis, Casey Kennington and David Schlangen

In-Context Evaluation of Unsupervised Dialogue Act Models for Tutorial Dialogue

Aysu Ezen-Can and Kristy Boyer

Spoken Dialog Systems for Automated Survey Interviewing

Michael Johnston, Patrick Ehlen, Frederick G. Conrad, Michael F. Schober, Christopher Antoun, Stefanie Fail, Andrew Hupp, Lucas Vickers, Huiying Yan and Chan Zhang

Friday, August 23, 2013 (continued)

Open-domain Utterance Generation for Conversational Dialogue Systems using Web-scale Dependency Structures

Hiroaki Sugiyama, Toyomi Meguro, Ryuichiro Higashinaka and Yasuhiro Minami

Evaluating State Representations for Reinforcement Learning of Turn-Taking Policies in Tutorial Dialogue

Christopher Mitchell, Kristy Boyer and James Lester

A Semi-supervised Approach for Natural Language Call Routing

Tatiana Gasanova, Eugene Zhukov, Roman Sergienko, Eugene Semenkin and Wolfgang Minker

Counseling Dialog System with SWIH Extraction

Sangdo Han, Kyusong Lee, Donghyeon Lee and Gary Geunbae Lee

Integration and test environment for an in-vehicle dialogue system in the SIMSI project

Staffan Larsson, Sebastian Berlin, Anders Eliasson and Fredrik Kronlid

Weakly and Strongly Constrained Dialogues for Language Learning

Claire Gardent, Alejandra Lorenzo, Laura Perez-Beltrachini and Lina Rojas-Barahona

Open-Domain Information Access with Talking Robots

Kristiina Jokinen and Graham Wilcock

Demonstration of the EmoteWizard of Oz Interface for Empathic Robotic Tutors

Shweta Bhargava, Srinivasan Janarthanam, Helen Hastie, Amol Deshmukh, Ruth Aylett, Lee Corrigan and Ginevra Castellano

The Map Task Dialogue System: A Test-bed for Modelling Human-Like Dialogue

Raveesh Meena, Gabriel Skantze and Joakim Gustafson

A Robotic Agent in a Virtual Environment that Performs Situated Incremental Understanding of Navigational Utterances

Takashi Yamauchi, Mikio Nakano and Kotaro Funakoshi

Roundtable: An Online Framework for Building Web-based Conversational Agents

Eric Forbell, Nicolai Kalisch, Fabrizio Morbini, Kelly Christoffersen, Kenji Sagae, David Traum and Albert A. Rizzo

Friday, August 23, 2013 (continued)

Oral session: Speech processing technology in dialog

- 16:55 *A Data-driven Model for Timing Feedback in a Map Task Dialogue System*
Raveesh Meena, Gabriel Skantze and Joakim Gustafson
- 17:15 *Continuously Predicting and Processing Barge-in During a Live Spoken Dialogue Task*
Ethan Selfridge, Iker Arizmendi, Peter Heeman and Jason Williams
- 17:35 *Which ASR should I choose for my dialogue system?*
Fabrizio Morbini, Kartik Audhkhasi, Kenji Sagae, Ron Artstein, Dogan Can, Panayiotis Georgiou, Shri Narayanan, Anton Leuski and David Traum

Day 2 conclusion

- 17:55 Informational announcements

Saturday, August 24, 2013

Oral session: Dialog state tracking

- 9:00 Session introduction
- 9:05 *The Dialog State Tracking Challenge*
Jason Williams, Antoine Raux, Deepak Ramachandran and Alan Black
- 9:25 *Recipe For Building Robust Spoken Dialog State Trackers: Dialog State Tracking Challenge System Description*
Sungjin Lee and Maxine Eskenazi
- 9:40 *A Simple and Generic Belief Tracking Mechanism for the Dialog State Tracking Challenge: On the believability of observed information*
Zhuoran Wang and Oliver Lemon
- 9:55 *Multi-domain learning and generalization in dialog state tracking*
Jason Williams
- 10:10 *Structured Discriminative Model For Dialog State Tracking*
Sungjin Lee

Poster session: Dialog state tracking

- 10:25 Poster “madness” (short presentations of each poster)
- 10:35 Poster session (with coffee)
- Comparison of Bayesian Discriminative and Generative Models for Dialogue State Tracking*
Lukáš Žilka, David Marek, Matěj Korvas and Filip Jurčiček
- Dialog State Tracking using Conditional Random Fields*
Hang Ren, Weiqun Xu, Yan Zhang and Yonghong Yan
- Engineering Statistical Dialog State Trackers: A Case Study on DSTC*
Daejoong Kim, Jaedeug Choi Choi, Kee-Eung Kim, Jungsu Lee and Jinho Sohn
- Deep Neural Network Approach for the Dialog State Tracking Challenge*
Matthew Henderson, Blaise Thomson and Steve Young

Future challenge task information sessions

- 11:50 Dialog state tracking challenge 2
- 12:05 The REAL dialog challenge

Conference closing

- 12:20 Best paper award ceremony and closing

